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10 UNITED STATES DISTRICT COURT

11 NORTHERN DISTRICT OF CALIFORNIA

12 SAN FRANCISCO DIVISION

13 WAYMO LLC,

14 Plaintiff,

15 vs.

16 UBER TECHNOLOGIES, INC.;
17 OTTOMOTTO LLC; OTTO TRUCKING
LLC,

18 Defendants.

CASE NO. 3:17-cv-00939

**PLAINTIFF WAYMO LLC'S REPLY
CLAIM CONSTRUCTION BRIEF**

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1 **I. INTRODUCTION**

2 Defendants’ claim construction positions are designed to support non-infringement and
 3 invalidity defenses—not to clarify the meaning of the claims. In their claim construction brief,
 4 Defendants repeatedly argue the merits of Waymo’s claims, even going so far as to argue about the
 5 application of the doctrine of equivalents. But those are disputed issues of fact for trial, not claim
 6 construction. Apart from purported noninfringement arguments, Defendants identify no proper basis
 7 to depart from the plain and ordinary meaning of the claim terms. As Waymo explained in its opening
 8 brief, the claims use plain English words and technical terms that have well-understood meanings to
 9 those of skill in the art. Defendants do not identify any lexicography, disavowal, or other basis for
 10 departing from the plain and ordinary meaning of these terms, and therefore their proposed
 11 constructions should be rejected.

12 Even considered on their merits, Defendants’ proposed constructions violate fundamental
 13 principles of claim construction. For the term “diode”—a known circuit element with a known
 14 structure and operation—Defendants propose a construction that no real-world diode would meet.
 15 This violates the principle that “words of a claim are generally given their ordinary and customary
 16 meaning” to persons skilled in the art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005)
 17 (*en banc*) (quotation omitted). For the term “charging path”—a plain English phrase with specific
 18 requirements set forth in the claim language—Defendants import a limitation directly from the
 19 specification that limits the claim to a “step-up circuit” and requires the “charging path” to “charge the
 20 capacitor to a voltage higher than the supply voltage.” This violates the principle that “we do not
 21 read limitations from the embodiments in the specification into the claims.” *Hill-Rom Servs., Inc. v.*
 22 *Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014).

23 Finally, Defendants’ cursory argument of indefiniteness falls well short of the burden to prove
 24 indefiniteness by clear and convincing evidence. For the phrase “wherein the capacitor is charged
 25 immediately following emission of a pulse of light from the light emitting element,” Defendants rely
 26 on nothing more than conclusory expert testimony to argue that this term would lack reasonable
 27 certainty to a person of ordinary skill in the art, despite clear objective guidance in the form of
 28 examples in the patent specification. Moreover, Defendants’ expert contradicted Defendants’

1 argument when he testified that a person of skill in the art could calculate the charge time for any
 2 given circuit, compare it to the circuit's firing rate, and conclude whether it meets the "immediately"
 3 requirement.

4 **II. ARGUMENT**

5 **A. The Plain and Ordinary Meaning of "Diode" Applies**

6 **1. Defendants' Noninfringement Arguments Do Not Necessitate a Claim** 7 **Construction**

8 The crux of Defendants' argument for why "diode" must be construed beyond its plain and
 9 ordinary meaning is that Defendants contend they do not infringe this limitation, therefore it must be
 10 construed. Dkt. 1233 at 5¹ ("To head off any attempt by Waymo to confuse the jury with this
 11 erroneous purported equivalency, Uber proposes constructions of "diode" and "charging path" in
 12 accordance with their ordinary and customary meaning in view of the intrinsic record.") This is a
 13 non-sequitur. There is no dispute between the parties that the claimed "diode" is just that.
 14 Defendants' claim construction brief is filled to the brim with arguments concerning the properties of
 15 "diodes" *generally*, not any specially defined diode within the specification of the '936 patent. Nor
 16 could Defendants credibly make such an argument. The '936 patent uses the term "diode" according
 17 to its plain and ordinary meaning. Dkt. 1116-1 ¶ 56. Defendants' own expert—Dr. Hobbs—agrees,
 18 admitting that the patent specification does not use a specialized meaning of diode or redefine the term
 19 differently than its plain and ordinary meaning. Jaffe Reply Dec. Ex. A ("Hobbs Dep.") at 85:12-16
 20 ("Q. And the patent just uses the term 'diode,' right? A. Yeah. They say diode. Q. And it doesn't
 21 have any specialized meaning of diode; is that right? A. I'm not aware of the patent making –
 22 providing a definition of diode, no.").

23 As a last resort, Defendants point to *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521
 24 F.3d 1351 (2008) to justify a construction. But as *O2 Micro* itself makes clear, claim construction is
 25 not an "obligatory exercise in redundancy." *Id.* at 1362 (quoting *U.S. Surgical Corp. v. Ethicon*,

26
 27 ¹ Electronic Case File ("ECF") Dkt. pinpoint page citations are to the ECF-generated page
 28 numbers at the top of the documents.

1 *Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997)). Courts need not paraphrase each claim term merely
 2 because a party proposes a construction. “[A]bsent a true dispute regarding the scope of the word or
 3 phrase, district courts are not required to step in and paraphrase each claim term.” *Star Envirotech,*
 4 *Inc. v. Redline Detection, LLC*, No. 12- cv-1861, 2015 WL 12743875, at *3 (C.D. Cal. Apr. 30, 2015);
 5 *see also Moneysuite Co. v. Ins. Answer Ctr., LLC*, No. SACV 11-1847 AG JPRX, 2013 WL 6925942,
 6 at *6 (C.D. Cal. Mar. 25, 2013) (“[M]erely rephrasing or paraphrasing the plain language of a claim
 7 by substituting synonyms does not represent genuine claim construction.”) (quoting *C.R. Bard, Inc. v.*
 8 *U.S. Surgical Corp.*, 388 F.3d 858, 863 (Fed. Cir. 2004) (alteration in original)).

9 *O2 Micro* supports Waymo’s position, not Defendants. The Federal Circuit’s *O2 Micro*
 10 decision held that it is the district court’s role to resolve “actual dispute[s] regarding the proper scope”
 11 of a claim term. *O2 Micro*, 521 F.3d at 1360. As the decision recognized, “[a] determination that a
 12 claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate,” but
 13 only when “a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’
 14 meaning does not resolve the parties’ dispute.” *Id.* at 1361. Neither circumstance is present in this
 15 case.

16 For “diode,” Defendants do not argue that the term has more than one ordinary meaning or that
 17 reliance on ordinary meaning does not resolve the parties dispute. Instead, Defendants argue that
 18 Waymo’s accurate description of the ordinary meaning of a diode is “unnecessary,” “confusing” and
 19 purportedly would not “assist the jury.” Dkt. 1233 at 5, 16-17. What Defendants *never* say in their
 20 brief is that Waymo’s description of the plain and ordinary meaning of diodes is inaccurate or that
 21 they dispute it. Defendants arguments about what particular properties of diodes would “assist the
 22 jury”—where there’s no dispute as to the ordinary meaning—does not require a claim construction.
 23 Under *O2 Micro*, the plain and ordinary meaning properly applies.

24 **2. Defendants’ Construction of “diode” Defies the Plain and Ordinary** 25 **Meaning of the Term**

26 Even when considered on substance, Defendants’ proposed construction should be rejected.
 27 Defendants’ original construction for the term “diode” was “a two terminal device with an anode and
 28 a cathode that allows the flow of current in one direction only.” Defendants have now modified their

1 construction to recite “a two terminal electronic device that allows the flow of current in one direction
 2 only.” Dkt. No. 1233 at 14.² The Court should reject both constructions because they misstate the
 3 operation of a diode. A diode does not “allow the flow of current in one direction only.” As Dr.
 4 Wolfe explained in his declaration supporting Waymo’s opening brief, “a diode generally allows
 5 current flow in the forward direction under forward bias conditions, and generally restricts current
 6 flow in the reverse direction under reverse bias conditions.” Dkt. 1116-1 ¶ 58. He then explained that
 7 “a person of ordinary skill in the art would understand that current flow in the reverse direction is not
 8 completely blocked as suggested by Defendants’ construction.” *Id.* Instead, “Some amount of
 9 current—referred to typically as “leakage” current—will flow in the reverse direction under reverse
 10 bias conditions, and current will flow freely in the reverse direction under breakdown.” *Id.* Finally,
 11 he explained that “Defendants’ proposed construction excludes both of these principles of operation,
 12 and therefore is not accurate from a technical standpoint.” *Id.*

13 Defendants do not dispute this testimony. Their expert, Dr. Hobbs, described the operation of
 14 the diode consistent with Dr. Wolfe’s testimony, explaining that “even when the diode is reverse
 15 biased, the device may allow a small, generally negligible current to flow through,” and that “[t]his
 16 current is known as leakage current.” Dkt. 1235 ¶ 32.³ Then, in his deposition, Dr. Hobbs agreed that
 17 every diode will exhibit leakage current. Hobbs Dep. at 74:16-22 (“Q. Okay. So you’ve never seen a

18 ² Defendants argue that they revised their proposed construction “to address argument raised by
 19 Waymo, for the first time, in its opening brief.” Dkt. 1233 at 14, n.2. Defendants do not identify any
 20 specific statements from Waymo to support this argument. The real motivation for Defendants’
 21 change of course is to support an argument that claim differentiation does not preclude Defendants’
 22 construction for the “charging path” limitation. *Id.* at 20-22. Defendants argue that the “charging
 23 path” recited in the independent claims must be “configured to charge the capacitor to a voltage higher
 24 than the supply voltage.” *Id.* at 17. As Waymo pointed out in its opening brief, this argument violates
 25 claim differentiation because dependent claims 4 and 12 include that exact requirement. Dkt. 1116 at
 19. Defendants argue that claim differentiation does not apply because claims 4 and 12 include
 additional requirements—namely that the diode includes an anode and a cathode (Dkt. 1233 at 20)—
 but defendants could not advance this argument under their previous construction of diode, which
 specifically recites an “anode” and “cathode.” Dkt. 1116 at 19; *see also id.* at 14; Dkt. 1073.

26 ³ Dr. Hobbs omitted breakdown current in his description of a diode. Hobbs Dep. at 103:25-
 104:5 (“Q. Diodes also have a property called breakdown; is that right? A. That’s right. Q. And I
 27 don’t think you discussed it in your report, but tell me if I missed it. A. I don’t recall discussing
 28 breakdown, no.”).

1 diode that doesn't have leakage current?" A. Semiconductor diodes will exhibit – under certain
 2 circumstances will exhibit leakage current. Q. All semiconductor diodes? A. Yes."), 83:8-12 ("Q. ...
 3 Any real-world physical diode will be capable of allowing leakage current in its reverse-bias state,
 4 correct? A. Yes. That's right."). Thus, no diode would meet Uber's definition of "allowing the flow
 5 of current in one direction only." *Id.* at 90:4-8 ("Q. So my question was, you wouldn't be able to find
 6 a diode that you could use to build the '936 patent circuit that allows the flow of current in one
 7 direction only, correct? A. It will exhibit leakage current.").

8 Accordingly, a person of skill in the art would understand that the plain and ordinary meaning
 9 of "diode" allows for current flow in both directions. *Phillips*, 415 F.3d at 1312 ("We have frequently
 10 stated that the words of a claim 'are generally given their ordinary and customary meaning.'")
 11 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The only reason
 12 to depart from the plain and ordinary meaning would be lexicography and disavowal—neither of
 13 which are present in this case. *Thorner v. Sony Comp. Entm't Amer. LLC*, 669 F.3d 1362, 1365 (Fed.
 14 Cir. 2012).⁴ Defendants point to two passages of the specification that describe the diode as
 15 preventing the capacitor from discharging and causing current through the inductor to go to zero, but
 16 neither passage rises to the level of lexicography or disavowal. Defendants' expert agrees the
 17 specification contains no specialized definition of diode. Hobbs Dep. at 85:12-16.

18 Defendants' apparently are taking the position that the plain and ordinary meaning should be
 19 redefined *inaccurately* because the concept of leakage current is purportedly not important to the
 20 patent. Dkt. 1233 at 14-17. Defendants do not cite legal authority to support this argument, which is
 21 not surprising because it would lead to varying and inaccurate "plain and ordinary" meanings for well-
 22 understood terms like "diode." Defendants should not be permitted to present an inaccurate definition
 23 of a well-understood technical term to the jury.⁵

24 _____
 25 ⁴ Defendants' citation to *Trustees of Columbia Univ. in the City of New York v. Symantec Corp.*,
 26 811 F.3d 1359 (Fed. Cir. 2016) does not change this. That decision simply explained that
 lexicography or disavowal may be express or implied. *Id.* at 1363-64. It did not broaden the
 circumstances under which a court may depart from the plain and ordinary meaning. *Id.*

27 ⁵ Defendants' make a number of unfounded statements concerning Waymo's infringement
 28 arguments. Dkt. 1233 at 17. Waymo intends to describe the operation of the claimed "diode" in the

B. Defendants’ Construction of the Term “charging path” Improperly Reads Limitations Into the Claims, Ignores Claim Differentiation, and Elevates Extrinsic Expert Testimony Over the Intrinsic Record

Defendants’ construction for the term “charging path” is based on the flawed theory that entire invention of the ’936 Patent—and therefore the asserted claims—must be limited to a “step-up circuit” that increases the charge on the capacitor to a voltage higher than the supply voltage. Dkt. 1233 at 17-20. The claim language and patent specification affirmatively reject this argument.

First, the patent does not use the words “step-up circuit”—a point that Defendants’ expert admits. Hobbs Dep. at 108:5-10 (“Q. Do you agree that the term ‘step-up circuit’ is not used in the ’936 patent? A. I don’t recall it being used there. Q. Do you recall seeing the words ‘step-up circuit’ in the claims of the ’936 patent? A. No.”).

Second, the language of the independent claims does not require the capacitor to be “configured to charge the capacitor to a voltage *higher than the supply voltage*.” The independent claims explain that the “the capacitor is configured to charge via the charging path such that a voltage across the capacitor increases from a *lower voltage level* to a *higher voltage level*.” ’936 Patent, claim 1 (emphasis added). The claim language does not place any restriction on the “lower voltage level” or “higher voltage level.” *Id.* The “lower voltage level” may be zero or near zero, while the “higher voltage level” may be any value above that, including a voltage that is less than, equal to, or greater than that of the voltage source. *Id.* Indeed, the only claim language Dr. Hobbs could identify to support Defendants’ proposed construction was the claimed “diode.” Hobbs Dep. at 138:15-18. But then he readily admitted that the presences of the diode does not automatically require the capacitor to charge to a voltage higher than that of the voltage source. *Id.* at 138:19-25 (“Q. ... Does the presence

context of the asserted claims and why a resistor is an equivalent. Any testimony that Waymo presents in this regard will be subject to cross-examination, so if Defendants are concerned that Waymo will argue “diodes allow current to flow in both directions *just like resistors*,” they can question Waymo’s witnesses about the argument. *Id.* By contrast, under Defendants’ proposed construction, Waymo would be precluded from describing the operation of a diode accurately and from explaining the concepts of leakage current and breakdown.

1 of the diode cause the charge on the capacitor to automatically increase to a voltage higher than the
2 supply voltage – A. No.”).

3 Dr. Hobbs also admitted that he failed to consider dependent claim 4 in his analysis of the
4 “charging path” limitation. *Id.* at 139:6-8 (“Q. And I don’t think you addressed claim 4 in your
5 declaration, right? A. I don’t believe so, no.”). As Waymo explained in its opening brief, claim 4
6 recites the exact same limitation that Defendants’ attempt to read into the independent claims through
7 their construction of “charging path”—*i.e.*, the limitation that “the higher voltage is greater than a
8 voltage of the voltage source.” Dkt. 1116 at 19-20; ’936 Patent, claim 4.

9 Defendants’ try to dismiss the presumption of claim differentiation by arguing that “there are
10 several significant distinctions between independent claim 1 and dependent claim 4,” and in particular
11 the requirements that the diode include an anode, a cathode, forward biasing, and reverse biasing.
12 Dkt. 1233 at 21-22. Defendants’ original construction of “diode” included an “anode” and “cathode”
13 as specific requirements (*see* Dkt. 1073), and Defendants argue that forward biasing and reverse
14 biasing are inherent properties of a diode. *Id.* at 8. These positions undermine the argument that
15 “there are several significant distinctions between independent claim 1 and dependent claim 4.”
16 Under Defendants’ previous position, the only distinction between claim 1 and claim 4 is that the
17 latter requires “the higher voltage” to be “greater than a voltage of the voltage source.” Reading this
18 limitation into claim 1 would render the meaningful limitation of claim 4 redundant, and thus violate
19 the doctrine of claim differentiation. *SunRace Roots Enterprise Co., Ltd. v. SRAM Corp.*, 336 F.3d
20 1298, 1302–03 (Fed. Cir. 2003) (“While we recognize that the doctrine of claim differentiation is not a
21 hard and fast rule of construction, it does create a presumption that each claim in a patent has a
22 different scope. That presumption is especially strong when the limitation in dispute is the only
23 meaningful difference between an independent and dependent claim, and one party is urging that the
24 limitation in the dependent claim should be read into the independent claim.”).

25 **Third**, the specification contradicts Defendants’ proposed construction of charging path. The
26 specification repeatedly explains that it is optional “to charge the capacitor to a voltage higher than
27 the supply voltage”:
28

- 1 • “As the inductor current changes from increasing to decreasing, the voltage at node
2 A 512 *may* increase to a higher level voltage (*e.g., a voltage greater than V_1*), before
3 decreasing. The transient higher level voltage at node A 512 (*e.g., $>V_1$*) is applied to the
4 capacitor 516.” ’936 Patent at 18:52-56 (emphasis added).
- 5 • “*The charge on the capacitor 516 may exceed the voltage V_1 of the voltage
6 source 502* due to transient variations at node A 512 caused by changes in current through
7 the inductor 510.” *Id.* at 19:26-29 (emphasis added).
- 8 • “*A voltage that exceeds V_1 may be held on the capacitor 516* after the diode 514 is reverse
9 biased to terminate a charging operation.” *Id.* at 19:29-31 (emphasis added).
- 10 • “For example, *the capacitor 516 may be initially charged to a voltage level of about 2
11 V_1* .” *Id.* at 19:31-33 (emphasis added).

12 Dr. Hobbs agreed that these examples use permissive language that indicates the capacitor may
13 or may not be charged to a voltage that exceeds that of the voltage source. Hobbs Dep. at 153:4-
14 155:6. Thus, they should not be used to limit the claims. *Hill-Rom Servs.*, 755 F.3d at 1371 (“While
15 we read claims in view of the specification, of which they are a part, we do not read limitations from
16 the embodiments in the specification into the claims.”).

17 ***Finally***, the extrinsic evidence contradicts Defendants’ construction. Defendants argue that
18 the claims must be limited to a step-up circuit, and that a step-up circuit necessarily charges the
19 capacitor to a voltage higher than that of the voltage source. Dkt. 1233 at 18-19. Dr. Hobbs
20 contradicted this argument when he admitted that a step-up circuit can charge the capacitor to any
21 value, including one equal to or less than the voltage source. Hobbs Dep. at 115:6-116:9.

22 In the context of the asserted claims, the “charging path” plainly refers to a path for charging
23 the capacitor. ’936 Patent at Claim 1. Dr. Hobbs admitted as much when asked if the term has an
24 easily understood meaning. *Id.* at 135:18-23 (“...if he said that there’s a battery and a capacitor and a
25 charging path, then I would guess that the path was whatever means he was using to charge the
26 capacitor.”). There is no basis to rewrite these plain English words to include additional limitations
27
28

1 found in the dependent claims and embodiments of the patent specification—especially when doing so
2 would violate the principles of claim construction.⁶

3 *O2 Micro* is of no help to Defendants here either. Defendants’ position is that the scope of the
4 term limits the claims to circuits that increase the voltage of the capacitor to a value greater than the
5 voltage source, while Waymo’s position is that it does not. As explained above, Defendants seek to
6 take the plain and ordinary meaning for “charging path” and simply tack on a limitation from the
7 preferred embodiment. Dkt. 1233 at 18 (“a person of skill would understand that the claimed
8 ‘charging path’ requires that it ‘charge the capacitor to a voltage higher than the supply voltage’ in
9 view of the intrinsic record.”). Adopting the “plain meaning” will fully resolve the parties’ dispute
10 and is all that is required here. *See Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291
11 (Fed. Cir. 2015) (“At the claim construction stage, the district court rejected Samsung’s argument
12 that ongoing activity is required — the heart of the parties’ disagreement — and declined to further
13 construe the term because it was a ‘straightforward term’ that required no construction. ... Because
14 the plain and ordinary meaning of the disputed claim language is clear, the district court did not err by
15 declining to construe the claim term.”).

16 **C. Defendants Have Failed to Prove Indefiniteness By Clear and Convincing** 17 **Evidence**

18 Indefiniteness requires the accused infringer to prove by clear and convincing evidence that the
19 claims fail to inform those skilled in the art about the scope of the invention with reasonable certainty.
20 *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (*on remand*).
21 Defendants’ page-and-a-half argument for the phrase “wherein the capacitor is charged immediately
22 following emission of a pulse of light from the light emitting element” falls well short of meeting this
23 burden.

24 _____
25 ⁶ Ironically, Defendants criticize Waymo for not presenting expert testimony on the “charging
26 path” limitation. Extrinsic expert testimony is hardly necessary when the plain language of the claims
27 and specification are clear concerning the meaning of a term like “charge path.” *Kara Tech. Inc. v.*
28 *Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) (“We have held that extrinsic evidence such as
expert testimony is ‘less significant than the intrinsic record in determining the legally operative
meaning of claim language.’”) (quoting *Phillips*, 415 F.3d at 1317).

1 **First**, Defendants wrongly assert that “immediately” refers to the time it takes to fully recharge
 2 the capacitor. Dkt. 1233 at 23. The specification explains the importance of *initiating* the charge
 3 cycle immediately after the laser diode emits a pulse of light—a feature distinguishing the invention
 4 from the prior art. ’936 Patent at 21:64-22:3 (“If, for example, a recharging operation were to be
 5 initiated after some duration following a pulse emission (e.g., using a second transistor other than a
 6 transistor controlling current through a laser diode), the additional time would increase the lag time
 7 between emission of subsequent pulses and thus reduce the duty cycle of the firing circuit.”). The
 8 specification also explains that the single-transistor design of the disclosed firing circuit allows the
 9 capacitor to *begin* charging the capacitor. *Id.* at 22:3-11 (“In some examples, the firing circuit 500 is
 10 configured to immediately recharge the capacitor 516 upon emission of a pulse because the recharging
 11 operation is initiated in response to operation of the same transistor 520 that initiates emission (e.g.,
 12 turning on the transistor 520 both causes a pulse to be emitted and, upon sufficient discharge from the
 13 capacitor 516, causes the diode 514 to become forward biased and current to begin flowing through
 14 the inductor 510 so as to initiate charging.”). This is shown in the timing diagram of Figure 5B,
 15 where the voltage on the capacitor begins increasing as soon as the light pulse ends at time T_{OFF} . *Id.*
 16 at Fig. 5B.⁷

17 Defendants do not raise indefiniteness arguments under the proper understanding of the claim
 18 term. Dkt. 1233 at 23. Their argument can be rejected for this reason alone.

19 **Second**, even under an interpretation of “immediately” that requires fully recharging the
 20 capacitor, Defendants have failed to present credible evidence that a person of ordinary skill in the art
 21 would lack reasonable certainty about the scope of the claimed invention. Dkt. 1233 at 23.
 22 Defendants admit that the specification provides an express example of the full recharge time for the
 23 circuit of Figure 5A. *Id.*; ’936 Patent at 21:55-64 (“The capacitor recharging interval Δt_{CHARGE} may
 24 be approximately 500 nanoseconds.”). And Dr. Hobbs agreed that a person of skill in the art could

25 ⁷ It makes sense that the inventors were focused on immediately initiating the charge cycle,
 26 because the remaining time to charge the capacitor would be dictated by the value of components
 27 selected. Hobbs Dep. at 171:1-19. The aspect of the charge operation that can be controlled through
 28 circuit design is initiation, which the inventors did through the single transistor design. ’936 Patent at
 22:3-11.

1 determine the equivalent of the 500-nanosecond interval for any given firing circuit. Hobbs Dep. at
2 171:1-172:15.

3 Defendants' only argument is that "the edges of the claim are murkier" because "a person of
4 skill could not determine if 501, 550, or 1,000 nanoseconds would fall within the scope of
5 'immediately.'" Dkt. 1233 at 23. But this argument is not supported by any evidence other than
6 conclusory testimony from Dr. Hobbs, who repeats the language in Defendants' brief nearly verbatim.
7 Dkt. 1235 ¶ 82. Defendants and Dr. Hobbs fail to provide any explanation or analysis as to why a
8 person of ordinary skill in the art would not be able to determine, with reasonable certainty, whether a
9 given firing circuit with a given recharge time falls within the scope of the "immediately"
10 requirement. This lack of evidence falls short of "clear and convincing" proof.

11 Moreover, Dr. Hobbs contradicted Defendants' argument during his deposition testimony. He
12 explained that a person of ordinary skill in the art could calculate the full recharge time for a given
13 firing circuit based on its inductance and capacitance values. Hobbs Dep. at 171:1-172:15. He then
14 explained that a person of ordinary skill in the art could compare the full recharge time to the circuit's
15 repetition rate, *i.e.*, the rate at which it fires laser pulses. *Id.* at 172:19-173:5. And finally he
16 explained that if the recharge time is sufficiently lower than refresh rate, then the "immediately"
17 requirement would be met. *Id.* at 173:20-174:2 ("[I]t's ready much sooner than it needs to be, so you
18 don't have to care how long it takes. That's—that would make it immediate in my lexicon."). By Dr.
19 Hobbs's own testimony, a person of ordinary skill in the art would be able to determine with
20 reasonable certainty whether a given firing circuit falls within the scope of the claims. Accordingly,
21 the "immediately" limitation does not render the claims indefinite. *Biosig*, 783 F.3d at 1382-83
22 (determining, on remand, that the phrase "spaced relationship" did not render the claims indefinite
23 because "an ordinarily skilled artisan would be able to determine this language requires the spaced
24 relationship to be neither infinitesimally small nor greater than the width of a user's hands.").⁸

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26 ⁸ Defendants' citation to *Core Wireless* is not applicable to these facts. Dkt. 1233 at 23. The
27 *Core Wireless* case involved conflicting descriptions in the patent specification about whether stealing
28 one or more "speech transmission frames" would "substantially impair the quality of user
information." *Core Wireless S.A.R.L. v. Apple Inc.*, No. 15-CV-05008-PSG, 2016 WL 3124614, at

1 **III. CONCLUSION**

2 For the foregoing reasons, the Court should reject Defendants' proposed constructions and find
3 the disputed claim terms to have their plain and ordinary meaning.

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5 DATED: August 23, 2017

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7 By /s/ Charles K. Verhoeven

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*12 (N.D. Cal. June 3, 2016). Defendants do not identify any conflicting statements in the
specification of the '936 Patent.